Application No. 10/797,143 Inventors: Han Chen, et al. Application Filed: March 11,2004

Response to Office Action mailed July 27, 2009

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-14. (Cancelled)

(Currently Amended) An exposure analyzing apparatus, comprising:
one or more processors; and

a memory in signal communication with the one or more processors, the memory configured for storing instructions which, when executed by the one or more processors, causes the one or more processors to

define a plurality of parameters;

determine a concentration of exposure using a financial perspective to determine financial exposure for a potential exposure location based at least in part on the defined one or more of the plurality of parameters, the defined plurality of parameters including one or more of a financial obligation amount associated with the potential exposure location or an amount of assumed risk level associated with the potential exposure location; and

generate an output associated with the determined concentration of exposure; wherein the financial perspective includes apportionment of liability of a total loss associated with the potential exposure location into a plurality of segments.

- 16. (Previously Presented) The apparatus of claim 15, wherein the memory configured for storing instructions which, when executed by the one or more processors, causes the one or more processors to define a region of interest.
- 17. (Previously Presented) The apparatus of claim 15, wherein said financial perspective defines net exposure for an exposure location.

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- 18. (Previously Presented) The apparatus of claim 15, wherein the memory configured for storing instructions which, when executed by the one or more processors, causes the one or more processors to uses exhaustive search approach.
- 19. (Previously Presented) The apparatus of claim 18, wherein the memory configured for storing instructions which, when executed by the one or more processors, causes the one or more processors to define a boundary for areas of analysis.
- 20. (Previously Presented) The apparatus of claim 18, wherein the memory configured for storing instructions which, when executed by the one or more processors, causes the one or more processors to generate a grid.
- 21. (Previously Presented) The apparatus of claim 20, wherein the grid is generated by defining grid cell dimensions.
- 22. (Previously Presented) The apparatus of claim 18, wherein the exhaustive search approach comprises a step of defining a boundary for an area of analysis.
- 23. (Previously Presented) The apparatus of claim 22, wherein the boundary is a circle.
- 24. (Previously Presented) The apparatus of claim 15, wherein the memory configured for storing instructions which, when executed by the one or more processors, causes the one or more processors to determine exposure for an area of analysis based on the sum of exposures of potential exposure locations located within the area of analysis.

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- 25. (Previously Presented) The apparatus of claim 15 wherein the memory configured for storing instructions which, when executed by the one or more processors, causes the one or more processors to define a results parameter.
- 26. (Previously Presented) The apparatus of claim 25, wherein the results parameter defines a format for an output, wherein the format is at least one of text, graphical or mapped format.
- 27. (Previously Presented) The apparatus of claim 15, wherein the memory configured for storing instructions which, when executed by the one or more processors, causes the one or more processors to capture data relating to at least one of policies, accounts, location, treaty, exposure, and financial perspective.
- 28. (Previously Presented) The apparatus of claim 15, wherein the memory configured for storing instructions which, when executed by the one or more processors, causes the one or more processors to determine concentration of exposure is by an analytical approach.
- 29. (Previously Presented) The apparatus of claim 28, wherein the analytical approach includes use of equations:

$$(Fy(Xi+Dx,Yj+Dy) - Fy(Xi+Dx,Yj-Dy)) - (Fy(Xi-Dx,Yj+Dy) - Fy(Xi-Dx,Yj-Dy)) = 0$$

 $(Fx(Xi+Dx,Yj+Dy) - Fx(Xi-Dx,Yj+Dy)) - (Fx(Xi+Dx,Yj-Dy) - Fx(Xi-Dx,Yj-Dy)) = 0.$

30. (Previously Presented) The apparatus of claim 24, wherein the memory configured for storing instructions which, when executed by the one or more processors, causes the one or more processors to compare the exposures of two or more of area of analysis and determine the area of analysis having the highest exposure.

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31. (Previously Presented) The apparatus of claim 15 wherein the total loss may include one or more of a ground up loss, a client loss, a gross loss, a net loss, or a reinsurance net loss.

- 32. (Previously Presented) The apparatus of claim 15 wherein the total loss includes a ground up loss comprising a total financial exposure when the potential exposure location is determined to be a complete loss.
- 33. (Previously Presented) The apparatus of claim 15 wherein the total loss includes a client loss comprising a loss to an insurer below a deductible associated with the liability.
- 34. (Previously Presented) The apparatus of claim 15 wherein the total loss includes a net loss comprising a loss to an insurer adjusted by one or more associated limits or deductibles.
- 35. (Previously Presented) The apparatus of claim 34 wherein one or more associated limits includes one or more re-insurer's share associated with the liability.
- 36. (Previously Presented) The apparatus of claim 15 wherein the reinsurance net loss includes a portion of the total loss associated with a reinsurer's portion of the liability.
- 37. (Previously Presented) The apparatus of claim 15 wherein the apportionment of liability for each of the plurality of segments are associated with a respective predetermined weighting.

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- 38. (Previously Presented) The apparatus of claim 37 wherein the respective predetermined weighting for each of the plurality of segments are scaled based on an actual liability level associated with each segment.
- 39. (Previously Presented) The apparatus of claim 15 wherein the output generated includes a visual indicator associated with each of the plurality of segments.
- 40. (Previously Presented) The apparatus of claim 39 wherein the visual indicator includes one or more of a color, an two-dimensional indicator, or a three-dimensional indicator.
- 41. (Currently Amended) A computer implemented method, comprising: retrieving <u>using a microprocessor</u> a plurality of attributes associated with a potential exposure location from a database;

determining <u>using a microprocessor</u> one or more parameters associated with each attribute, each of the one or more parameters including one or more of a liability level or a coverage level for a loss to the potential exposure location, the liability level including one or more of a financial obligation amount associated with the potential exposure location or an amount of assumed risk level associated with the potential exposure location; and

determining <u>using a microprocessor</u> a concentration of exposure for the potential exposure location based on the determined one or more parameters;

outputting an indication of the determined concentration of exposure;

associating the indication of the determined concentration of exposure to the potential exposure location; and

storing the indication of the determined concentration of exposure in the database;

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wherein the determined concentration of exposure indication includes a plurality of varying levels of liability within the potential exposure location.

42. (Previously Presented) The computer implemented method of claim 41 wherein the indication of the determined concentration of exposure includes one or more of an audible indication, or a visual indication.

43. (Previously Presented) The computer implemented method of claim 41 wherein the potential exposure location is determined based on one or more of a geographical information, a structural information, a financial information, or an insurance coverage information.

44. (Previously Presented) The computer implemented method of claim 41 including updating the determined concentration of exposure when one or more of the plurality of attributes is modified.